

### **REMARKS**

This response is intended as a full and complete response to the second final Office Action mailed July 26, 2005. In the Office Action, the Examiner notes that claims 1-16 and 21-24 are pending and rejected. By this response, claims 1 and 9 have been amended. Claim 25 have been added. No new matter has been added.

In view of the following discussion, Applicants submit that none of the claims now pending in the application are anticipated or obvious under the respective provisions of 35 U.S.C. § 103.

It is to be understood that Applicants do not acquiesce to the Examiner's characterizations of the art of record or to Applicants' subject matter recited in the pending claims. Further, Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant responsive reply.

### **REJECTIONS**

#### **35 U.S.C. §103**

##### **Claims 1-16 and 21-24**

The Examiner has rejected claims 1-16 and 21-24 under 35 U.S.C. §103(a) as being unpatentable over Kai et al. (U.S. Patent US 6,278,536, hereinafter "Kai") in view of Darcie (U.S. Patent US 4,701,904). Applicants respectfully traverse the rejection.

Applicants' independent claim 1 recites (independent claims 9 and 25 recite similar limitations):

1. A node for processing upstream optical signal and downstream optical signal in a fiber optic communication network, the node comprising:  
a first optical block including a first device for converting a first upstream optical signal at a first frequency into a first electrical signal, a second device for demodulating from the first electrical signal first information modulated on the first optical signal, a third device for modulating on a second electrical signal second information, a fourth device for converting the second information modulated on the second electrical signal into a second optical signal at the first frequency, a fifth device for providing a third optical signal at a second frequency, the third optical signal having third information modulated on it, a sixth device for multiplexing the second and third optical signals and placing the

multiplexed second and third optical signals on the network as upstream optical signal;

a second optical block including a first device for converting a first downstream optical signal at a first frequency into a first electrical signal, a second device for demodulating from the first electrical signal first information modulated on the first optical signal, a third device for modulating on a second electrical signal second information, a fourth device for converting the second information modulated on the second electrical signal into a second optical signal at the first frequency, a fifth device for providing a third optical signal at a second frequency, the third optical signal having third information modulated on it, a sixth device for multiplexing the second and third optical signals and placing the multiplexed second and third optical signals on the network as downstream optical signal; and

a control device, for processing control information included within said first information of each of said first and second optical block and providing within said second information of each of said first and second optical block control information adapted for use by another node.  
(emphasis added).

The test under 35 U.S.C. §103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. *Jones v. Hardy*, 110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). Thus, it is impermissible to focus either on the "gist" or "core" of the invention, *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 230 USPQ 416, 420 (Fed. Cir. 1986) (emphasis added). Moreover, the invention as a whole is not restricted to the specific subject matter claimed, but also embraces its properties and the problem it solves. *In re Wright*, 6 USPQ 2d 1959, 1961 (Fed. Cir. 1988) (emphasis added). Furthermore, to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Not all limitations are taught or suggested by Kai and Darcie, and the combination of Kai in view of Darcie fails to teach or suggest Applicants' invention as a whole.

In particular, neither Kai nor Darcie discloses, suggests or teaches a control device deciding which input signals will be processed and provided as the output signals. (See specification, page 22, lines 25-30). Specifically, Kai and Darcie do not

make any decisions regarding the received signals. They are silent on a control device, for processing control information included within said first information of each of said first and second optical block and providing within said second information of each of said first and second optical block control information adapted for use by another node.

Kai discloses a node in a bi-directional optical ring with a working path and a protection path. Where there is a failure in the working path, the path is routed to travel along the protected path. Nowhere in the Kai reference is there any disclosure, teaching or suggestion of processing and providing of signals in both upstream and downstream directions of two optical blocks as claimed. Therefore, Kai does not disclose, teach or suggest "a control device, for processing control information included within said first information of each of said first and second optical block and providing within said second information of each of said first and second optical block control information adapted for use by another node."

Furthermore, Darcie fails to bridge the substantial gap between the Kai reference and Applicants' invention. Darcie merely discloses an optical receiver performs optical to electrical conversion and demultiplexing of the signals. It does not disclose, teach or suggest a controller for a control device, for processing control information included within said first information of each of said first and second optical block and providing within said second information of each of said first and second optical block control information adapted for use by another node.

There is no motivation to combine Kai with Darcie. Even if the two references could somehow be operably combined, the combination would still lack the limitation "a control device, for processing control information included within said first information of each of said first and second optical block and providing within said second information of each of said first and second optical block control information adapted for use by another node."

As such, Applicants submit that independent claims 1 and 9 are not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Furthermore, claims 2-8, 10-16 and 21-24 depend directly or indirectly from independent claims 1 and 9 and recite additional features thereof. As such, and at least for the same reasons set forth above with respect to Applicants' independent claims 1

and 9, Applicants submit that these claims are also non-obvious and allowable under 35 U.S.C. §103. Therefore, Applicants respectfully request that the rejections be withdrawn.

### SECONDARY REFERENCES

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to Applicants' disclosure than the primary references cited in the Office Action. Therefore, Applicants believe that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

### CONCLUSION

Thus, Applicants submit that none of the claims presently in the application are anticipated or obvious under the respective provisions of 35 U.S.C. §103. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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